1: Bioessays 1993 Oct;15(10):645-50 Related Articles, Books

The molecular biology of taste transduction.

Margolskee RF.

Roche Research Center, Roche Institute of Molecular Biology, Nutley, NJ 07110.

Taste cells respond to a wide variety of chemical stimuli: certain ions are perceived as salty (Na+) or sour (H+); other small molecules are perceived as sweet (sugars) and bitter (alkaloids). Taste has evolutionary value allowing animals to respond positively (to sweet carbohydrates and salty NaCl) or aversively (to bitter poisons and corrosive acids). Recently, some of the proteins involved in taste transduction have been cloned. Several different G proteins have been identified and cloned from taste tissue: gustducin is a taste cell specific G protein closely related to the transducins. Work is under way to clone additional components of the taste transduction pathways. The combination of electrophysiology, biochemistry and molecular biology is being used to characterize taste receptor cells and their sensory transduction mechanisms.

Publication Types:
- Review
- Review, tutorial

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